

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method for manufacturing a plasma display panel, comprising the steps of:

forming barrier ribs on a surface of an insulating substrate in order to separate a plurality of cells from one another;

applying a phosphor material in the form of paste to each of said cells by covering said surface of said insulating substrate and side surfaces of said ribs with said phosphor material; and

inspecting ~~whether or not~~ said phosphor material is ~~properly applied to each of said cells~~ prior to a drying process therefor said phosphor material so as to determine whether an amount of said phosphor material in each of said cells is suitable, excessive or small by radiating visible light onto a surface of said phosphor material and observing a pattern of said phosphor material obtained from visible light reflected from each of said plurality of cells;

wherein said determination is performed in accordance with a relationship between various conditions of the phosphor material in a cell after said drying process and various patterns of said phosphor material obtained from said visible light reflected from said phosphor material in the cell before said drying process.
2. (currently amended): The method for manufacturing a plasma display panel according to claim 1, wherein said observing step comprises the steps of:

capturing image data of said phosphor material applied to each of said cells during said radiation of said visible light onto said surface of said applied phosphor material;

distinguishing ~~said pattern of~~ patterns of said image data each comprising visible light reflected from each of said plurality of cells from one another based on said image data; and

determining ~~on the basis of said pattern whether or not said phosphor material applied to each of said cells will provide a proper shape after said drying process of said phosphor material~~ whether or not a phosphor layer formed by drying said phosphor material will normally be formed.

3. (currently amended): The method for manufacturing a plasma display panel according to claim 21, wherein said ~~determining inspecting~~ step is carried out based on whether an amount of said phosphor material applied to each of said plurality of cells is suitable, excessive or small, further determines whether or not any one of said plurality of cells includes a pinhole or an abnormal substance, and whether or not said phosphor material flows into a cell to which said phosphor material is not yet applied so far.

4. (previously presented): The method for manufacturing a plasma display panel according to claim 2, wherein the determining step comprises the steps of:

detecting a micro-defect defined as a defect included in any one of said plurality of cells;
and

detecting a macro-defect defined as a defect included in any one of blocks each comprising a plurality of cells.

5. (previously presented): The method for manufacturing a plasma display panel according to claim 1, wherein the applying step is performed based on a result obtained by an inspecting step performed for another plasma display panel manufactured before.

6. (currently amended): The method for manufacturing a plasma display panel according to claim 1, wherein said phosphor material includes ~~a plurality of types that have different emission colors to each other and said types of the phosphor material includes three kinds of materials emitting different colors, and said three kinds of materials are separately applied to the different cells in a predetermined order in first, second and third application steps, respectively, and the inspection step for inspecting said phosphor material is performed in such a manner that said types of the phosphor material are respectively inspected after their applications to the cells, and conditions of a type of the phosphor materials applied in the second order or later to the cells is assessed not only by a result of an inspection performed after its application but also by results of all inspections performed before its application~~ after the first application step and before the second application step, one of said three kinds of materials applied in the first application step is inspected, and after the second application step and before the third application step, another one of said three kinds of materials applied in the second application step is inspected with an inspection result of said material applied in the first application step being taken into account, and after the third application step, a last one of said three kinds of materials applied in the third application step is inspected with inspection results of said materials applied in the first and second application steps being taken into account.

7. (currently amended): The method for manufacturing a plasma display panel

according to claim 1, wherein said visible light has a wavelength that does not excite said phosphor material to emit light.

8. (previously presented): The method for manufacturing a plasma display panel according to claim 1, wherein the applying step is performed by printing techniques.

9. (canceled).

10. (canceled).

11. (canceled).

12. (canceled).

13. (canceled).

14. (canceled).

15. (currently amended): A method for manufacturing a plasma display panel, comprising the steps of:

forming barrier ribs on a surface of an insulating substrate in order to separate a plurality of cells from one another;

applying a phosphor material in the form of paste to each of said cells by covering said surface of said insulating substrate and side surfaces of said barrier ribs with said phosphor material; and

inspecting said phosphor material prior to a drying process ~~said phosphor material~~ by capturing image data of said applied phosphor material while radiating visible light onto a surface of said phosphor material, distinguishing ~~a pattern~~ patterns of said image data each

comprising visible light reflected from each of said plurality of cells from one another based on said image data, and determining whether or not said phosphor material applied to each of said cells will provide a proper shape after said drying process based on a determination of whether an amount of said phosphor material applied to each of said cells is suitable, excessive or small in accordance with a relationship between various conditions of the phosphor material in a cell after said drying process and various patterns of said phosphor material obtained from said visible light reflected from said phosphor material in the cell before said drying process.

16. (currently amended): A method for manufacturing a plasma display panel, comprising the steps of:

forming barrier ribs on a surface of an insulating substrate in order to separate a plurality of cells from one another;

applying a phosphor material in the form of paste to a surface of said insulating substrate and side surfaces of said ribs; and

radiating visible light onto a surface of said phosphor material prior to drying said phosphor material and observing a pattern of said phosphor material obtained from visible light reflected from each of said plurality of cells in order to inspect whether a phosphor material is normally being applied to each of said plurality of cells,

wherein the inspection step of inspecting whether a phosphor material is normally being applied to each of said plurality of cells comprises the steps of:

capturing an image of said applied phosphor material while radiating said visible light onto a surface of said applied phosphor material in order to obtain image data indicative of said image of said applied phosphor material;

distinguishing patterns of images each ~~consisting of~~ comprising visible light
reflected from each of said plurality of cells from one another based on said image data; and

inspecting whether said phosphor material is normally being applied to each of
said plurality of cells based on results obtained by distinguishing said patterns from one another
in order to determine whether or not a phosphor layer formed by drying said phosphor material
will normally be formed, and

wherein the step of determining whether or not a phosphor layer formed by drying said
phosphor material will normally be formed is carried out such that whether an amount of a
phosphor material applied to each of said plurality of cells is suitable, excessive or small is
determined, whether or not each of said plurality of cells includes one of a pinhole and an
abnormal substance is determined, and further, whether or not said phosphor material has flowed
into a cell to which said phosphor material is not to be applied is determined in accordance with
a relationship between various conditions of the phosphor material in a cell after said drying
process and various patterns of said phosphor material obtained from said visible light reflected
from said phosphor material in the cell before said drying process.